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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/982,720	10/18/2001	Moshe Rock	10638-025001	8722
26161	7590	10/27/2004	EXAMINER	
FISH & RICHARDSON PC 225 FRANKLIN ST BOSTON, MA 02110			BEFUMO, JENNA LEIGH	
			ART UNIT	PAPER NUMBER
			1771	

DATE MAILED: 10/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/982,720

Applicant(s)

ROCK ET AL.

Examiner

Jenna-Leigh Befumo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27,30 and 37 is/are pending in the application.
- 4a) Of the above claim(s) 19-23,26 and 27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18,24,25,30 and 37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 1, 2004 has been entered.

Response to Amendment

2. The Amendment submitted on September 1, 2004, has been entered. Claims 28, 29, 31-36, and 38 – 54 have been cancelled. Claims 1, 14, 15, 30, and 37 have been amended. Therefore, the pending claims are 1 – 27, 30, and 37. Claims 19 – 23, 26, and 27 are withdrawn from consideration as being drawn to a nonelected invention.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 14 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claims 14 and 15 recite the limitation "raised fibers" in line 2. There is insufficient antecedent basis for this limitation in the claim. The previous claims disclose a loop pile fabric and never recites that either side of the fabric has raised fibers other than the loop pile produced during knitting. While the applicant recites the fabric is a double face velour fabric, the applicant

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doesn't claim that the velour surface is produced by sanding, napping, or some other raising process. So does the term "raised fibers" just refer to the loop yarns recited in the claim or is the fabric treated by a raising process to produce the velour surfaces?

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
7. Claims 1 – 9, 16 – 18, 25, 30, and 37 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Lombardi et al. (4,103,518) in view of Ploch et al (3,837,943) for the reasons of record.
8. Claims 10 – 13 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Lombardi et al. in view of Ploch et al. as applied to claim 1 above, and further in view of Richards et al. (5,557,950) for the reasons of record.
9. Claim 24 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Lombardi et al. in view of Ploch et al. as applied to claim 1 above, and further in view of Callaway for the reasons of record.
10. Claims 14 and 15 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Lombardi et al. in view of Ploch et al. and Richards et al., as applied to claim 10 above, and in further view of Wood et al. (US 2002/0124365 A1) for the reasons of record.

Response to Arguments

11. Applicant's arguments filed September 1, 2004 have been fully considered but they are not persuasive. The applicant contends that the knitted fabric produced by Lombardi et al. and the *sewing* process taught by Ploch et al. are not analogous or similar (response pages 7 and 8).

The applicant argues that the *sewing* process is used to create *seams* which form fleece or pile. As discussed in the last Office Action, the process described by Ploch et al. creates velvet pile fabrics by stitching multiple rows of loop pile yarns to the surface of a ground cloth and then cutting the loop yarns to create a cut pile surface. The process described by Ploch et al. works by creating a row of interlinking loops from the stitching thread, which creates the *seams*, and holds the pile yarns to the ground fabric. The process does not create *seams*, that are used to sew together pieces of fabric to form a finished garment. Instead, the *seams* are multiple rows of adjacent stitches used to hold a pile yarn to a base fabric. Hence, the finished product would comprise multiple rows of pile yarns which are attached to the ground fabric by a stitching thread. Lombardi et al. discloses a pile structure comprising loops which are interconnected or knitted jointly with a ground yarn into the base fabric. Thus, the ground yarn disclosed by Lombardi et al. functions to attach the loop yarns to the ground cloth. Therefore, while Ploch et al. and Lombardi et al. might use slightly different processes to attach the loop yarns to the ground fabric, both the stitching yarn of Ploch et al. and the ground yarn of Lombardi et al. function in a similar manner, i.e., to attach the loop yarn to the base fabric layer. The only difference between the two pile fabrics is the fact that Ploch et al. uses a preformed ground fabric and Lombardi et al. knits the ground fabric at the same time the pile yarns are attached to the ground fabric.

Further, Ploch et al. discloses using a heat sensitive stitching yarn is advantageous because it produces a stable and wear resistant compound fabric (column 1, lines 35 – 36). First, Ploch et al. discloses that activating the heat sensitive component thermally bonds the lower melting component to the ground fabric and pile yarns, as well as causing the threads to shrink

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and further improve the bonding of the compound fabric (column 1, line 65 – column 2, line 5).

The thermal bonds would inherently increase the stability of the fabric and increase the bond strength between the loop yarn and the base fabric. Ploch et al. also teaches that using heat shrinkable yarns bulks the fabrics at the *seams* and fills the holes in the base fabric (column 3, lines 60 – 67). Increasing the bulk of the overall fabric, as well as filling the holes in the base fabric, would inherently decrease the air permeability of the fabric since the spaces that air can travel through are smaller and the density of the fabric is greater. Hence, Ploch et al. discloses that using a thermally sensitive stitch yarn would increase the stability of the fabric by bonding the pile and ground layer together as well as fill the holes in the fabric and increase the bulk of the fabric. These advantages would be relevant to any type of pile fabrics which is produced by using yarns or threads to attach pile yarns to a ground fabric, whether the fabric is produced in a single knitting step or by attaching the pile yarns to a separate ground fabric. Thus, not only do Ploch et al. and Lombardi et al. have similar structures, but Ploch et al. is analogous to pile fabrics in general because Ploch et al. teaches how to increase the stability of a pile fabric, increase the bulk of a pile fabric, and fill the holes in the ground layer of a pile fabric.


Therefore, it would have been obvious to one of ordinary skill in the art to use a thermally sensitive yarn as taught by Ploch et al. as the ground yarn in Lombardi et al. since Ploch et al. discloses that the thermally sensitive yarn would thermally bind the loop yarns to the base fabric, increase the bulk of the overall fabric, and fill the holes in the ground fabric. Using a thermally sensitive yarn in the pile fabric of Lombardi et al. would have the same advantages as adding a thermally sensitive yarn to the pile fabric taught by Ploch et al. Therefore, the rejection is maintained.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenna-Leigh Befumo whose telephone number is (571) 272-1472. The examiner can normally be reached on Monday - Friday (8:00 - 5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jenna-Leigh Befumo
October 25, 2004